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Abstract of the Disclosure

A trifluorostyrene and substituted vinyl compound based partially fluorinated copolymer, an ionic conductive polymer membrane including the same, and a fuel cell adopting the ionic conductive polymer membrane, wherein the partially fluorinated copolymer has formula (1):

$$\begin{array}{c|c}
 & F & F \\
\hline
 & C & C \\
 & C & C \\
 & F & M & R_1 & R_2 \\
\hline
 & C & C & C \\
 & R_3 & M & R_3 & R_3 \\
\hline
 & C & C & R_3 & R_3 & R_3 \\
\hline
 & C & C & R_3 & R_3 & R_3 & R_3 \\
\hline
 & C & C & C & R_3 & R_3 & R_3 & R_3 & R_3 \\
\hline
 & C & C & C & R_3 \\
\hline
 & C & C & C & R_3 &$$

where each of R_1 , R_2 and R_3 is F, H or CH_3 ; X is a hydroxy group or a trifluoromethyl group; m is an integer greater than zero; n is an integer greater than zero; and p, q and r are zero or integers greater than zero.